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## The Relationship between the Epistemological Believes and Academic Performance

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### Abstract

This research determined the relationship between the epistemological believes and academic performance of students. In order to achieve the goal there are some important questions to answer:

1. How are the conditions of the epistemological beliefs and its aspects?
2. Are there any relations between aspects of Organizing knowledge ability and academic performance of students?
3. Are there any relations between aspects of fast learning and academic performance of students?
4. Are there any relations between aspects of learning control and academic performance of students?
5. Are there any relations between aspects of firm knowledge and academic performance of students?
6. Are there any relations between aspects of knowledge source and academic performance of t students?

385 students of two universities were chosen in random sampling. In order to analysing the parameters of the research researcher used epistemological believes questionnaire (2007). This questionnaire contains 32 questions about the aspects of epistemological beliefs. The questionnaire used in this research, is standard, fur there more its validity and reliability is confirmed by .74 coefficients. Regression in step by step form and for special question Pearson correlation test is used. There is a meaning linear relation between Academic performance and knowledge speed aspect about the main question and there is only a meaning negative relation between knowledge speed aspect and Academic performance about special question and there is not any relation in any other aspects.

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### 1. Introduction

Epistemological beliefs over the past few decades, with titles Epistemic states, recognizing the knowledge and epistemological thinking has been applied. Schumer first raised the systematic beliefs to review the "faith" in their field. His epistemological beliefs as adults need to find consistency and you can change it even causes extreme confusion and disorder (Schumer, 2004). Educational psychologists' epistemological beliefs, assumptions and beliefs as a system of implicit and absolute consider students have about the nature of knowledge and its acquisition (Palsn and Feldman, 2005). These beliefs have different dimensions and issues such as the source of knowledge, the certainty of knowledge Organize knowledge, speed of knowledge acquisition and control of the learning process are

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all (Schumer and others, 1997). The categories along the continuum in a crude and naive belief in the belief are that there are complex and erudite (Palsn and Feldman, 2005).

### **Main goal:**

The relationship between the epistemological believes and academic performance of students.

### **Minor goals:**

1. How are the conditions of the epistemological beliefs and its aspects?
2. Are there any relations between aspects of Organizing knowledge ability and academic performance of the students?
3. Are there any relations between aspects of fast learning and academic performance of students?
4. Are there any relations between aspects of learning control and academic performance of students?
5. Are there any relations between aspects of firm knowledge and academic performance of students?
6. Are there any relations between aspects of knowledge source and academic performance of students?

### **Epistemological beliefs**

Epistemology is one of the main areas of philosophy deals with nature and justification of human knowledge. Today, psychologists and education experts increasingly on development and epistemological beliefs of people, people know how phenomena, Theories and beliefs they hold about knowing, And what a way to how epistemological assumptions affect the cognitive processes of thinking and reasoning have shown an interest. Piaget (1950) term to describe the genetic epistemological theory of rational transformation applied. The main objective of the research of Piaget was epistemological. Therefore, by choosing psychology as the genetic origin evolution of human species review, based on his findings and theories which is related to identification and study of many categories like that; metacognition and epistemological beliefs? So basically it is a philosophical discussion of cognition, but the study of psychology as well. Interaction with the philosophy of psychology, evolutionary psychology is a turning point in history. This link was an important step in response to behaviourist view of learning is considered to a distinct category of knowledge. Parallel of this development, Perry's efforts in understanding how individuals interpret experiences are diverse and plural, Lead to the development of epistemological theories tour. Hofer and Pntryj (1997) study of epistemology, which started from the mid-1950s, they are classified into three main groups: First, examining the impact of epistemological beliefs on learning experiences have been interpreted .Perry plans a chain of opportunities to draw The process of transition from one level to the other person will be upgraded, Therefore it is postulated that the person in the world can be changed with passage of situation. Pixie in the evolution of Harvard graduates showed that epistemological beliefs assume that students entering university based in simplicity, certainty and authority in education abroad. However, most students in their final years of study that stratified complex knowledge-based temporal reasoning. Epistemological beliefs of almost all activities in the field of psychology can be studied for the first time in two William Perry (1945-1970) was considered. 13 students were selected as sample during an interview with them on this issue suggested that has what you want for your outstanding and impressive has been talked? Based on these interviews, ethics and wisdom of Perry's plan would establish. The project consists of the sequence is not a position with which the process of transition from one level to another will be upgraded It is obvious that the person filed his worldview is changed by passing situations. Perry's in thinking as a transformation of the way people interpret the world around them, describing the change.

### **Learning**

Hrgnhan and Olson (1997) argue that Learning is one of the most important issues in psychology today, and yet one of the most difficult concepts to define. Due to the importance and complexity of learning concept to have a different definition However, the most popular definition of learning is: The process is relatively stable change in behaviour or potential behaviour, result of experience and it cannot be a temporary state of the body, such as those caused by illness, fatigue or drugs is attributed Pdydmy. These are strongly related to both students' ideas and conceptions of learning and perceptions of their teaching-learning context, and refer to how students go about

learning, to their learning intentions (motives) and their methods (strategies) (Biggs, 2001). This construct plays a central role as a process between the input (e.g. teaching context, student factors) and the output (e.g. quality of cognitive learning outcomes). (Säljö, 1982; Marton & Säljö, 1984, Van Rossum & Schenk, 1984; Biggs & Moore, 1993). Researchers have identified two contrasting and theoretically opposed learning approaches: deep and surface (Biggs, 1987a; Entwistle *et al.*, 2001). Students who deploy a deep approach to learning tend to conceive of learning as transforming information, to be intrinsically motivated and to use strategies focusing on the meaning of the material to be learned. Students who deploy a surface approach tend, on the contrary, to conceive of learning as reproducing knowledge, to be extrinsically motivated and to use strategies focusing on the reproduction of those materials.

## **2. Methodology**

### **2.1. Research design**

The research design for this study is correlation research.

#### **2.1.1. Participants**

The sample is based on a stratified random sample (by the university) is collected. A sample of 385 students, according to J.C Morgan table is obtained. 358 subjects of the University of Payam Noor and 27 medical universities.

### **Instruments**

Variables for the five-choice questionnaire in Likert type epistemological beliefs Schumer (2007) was used. The questionnaire consisted of 32 questions related to the five dimensions of epistemological beliefs proven ability, quick learning, simple knowledge, certain knowledge, and knowledge is power

#### *2.1.1.1. Reliability and validity*

The questions from the questionnaire Doyle and Schumer - Ykynz (2001) with reliability coefficient of 0/74 using the retest and coefficient alpha Cronbach for each factor scale in the range ( $0.85 = \alpha$ ) to ( $0.63 = \alpha$ ) have reported Translated and edited by scholar. A prototype based on 20 samples using Cronbach's alpha of reliability was assessed by questionnaire. The alpha value is equal to 0/69 which is great value and reliability of the questionnaire is high.

#### *2.1.1.2. Methods of data collection*

In this study, data collection methods were used in the field of library. In addition to a library of books and articles in Persian and Latin were used in different Web sites.

#### *2.1.1.3. Methods of data analysis*

Data analysis, descriptive and inferential statistical methods used Descriptive statistics for drawing diagrams, tables, frequency distribution, mean, variance and standard deviation of error was used. Inferential statistics using single-sample t-test to check how the epistemological beliefs Pearson test for the analysis of cognitive and epistemological

beliefs and academic performance variables Education and regression analysis was used to assess the interaction variables of gender.

### 3. Results

**Table 1. Correlation between *Epistemological and academic performance***

	M	df	SD	T
1. Organizing knowledge ability and academic performance	3.38	384	0.58	12.94
2. Rate learning and academic performance	2.60	384	0.80	-9.63
3. Learning control and academic performance	2.99	384	0.68	-0.26
4. Firm knowledge and academic performance	3.19	384	0.54	6.91
5. Knowledge source and academic performance	3.17	384	0.59	5.82
6. Relationship between the epistemological believes and academic performance	<b>3.09</b>	<b>384</b>	<b>0.33</b>	<b>5.65</b>

**P<0/05**

### Conclusions

Study the relationship between epistemological beliefs and academic performance of students has not relationship between rate learning and academic performance the rest of relations has resulted in significant .The results of such research findings and Conley, a. and vekiri,i. (2004), Schumer and Biggs, J. B. (1987a) and similar studies are inconsistent. The dimensions of epistemological beliefs and knowledge organization with the highest average speed are the average of the lowest. But the meaning of that beliefs are derived from knowledge of the rate that can be paid to the evaluation We have taken reasonable speed, which is a deep understanding and grasp material Action to improve academic performance And adopt the beliefs of naive and superficial Leads to a superficial understanding of the learning rate, which is the low performance is avoided.

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